



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

conspicuous feature, sufficient to identify the plant at a glance, is the inflation at the middle of each petiole, forming a sort of elliptical bladder, which on the larger leaves is an inch long by half an inch in diameter. The bladders are entirely closed, not hollow, but of the same cellular, spongy texture as the petiole, and we suppose their purpose must be to assist in sustaining above the water the somewhat heavy clustered foliage. They form in fact a cordon of *life-preservers* about the central flowering parts.

The flowers (June–July) are solitary, short-peduncled, axillary, small and white; petals, calyx lobes and stamens, four, the latter inserted with the petals on a disk crowning the ovary; stigma, one, capitate; ovary semi-inferior, embraced by the adnate calyx tube, which rapidly enlarges in fruit to a turbinate, bony nut, nearly two inches long, one-celled and one-seeded from arrest; and from the calyx lobes are developed four sharp, spreading horns or spines, somewhat recurved, and often one-third of an inch long. The seed is mealy and edible, resembling the chestnut.

From the nut the plant is in Germany popularly called *Schwimmende Wassernuss*—Swimming Water-nut—which is so apt that it might well bear here the same popular name, rather than that of the “European Water Caltrop” by which it has been sometimes called. However introduced, it bids fair to stay, and its gradual extension southwards may be looked for. A. B.

§ 336. **Gray’s Botanical Text Book.**—In our notice of this work in the June No. there were some obvious typographical errors, p. 318, l. 4, “Diplosteminous” for *Diplostemonous*; p. 319, about the middle “Brown” for Braun; and on p. 320, last line but one of third paragraph, “it is entitled” where “it” should be omitted, and also the comma after “views,” in the next paragraph but one; and in the final line for “levaes” read leaves. But the chief error was the omission of some words in a sentence near the beginning of page 318. The sentence should read: In the doctrine of the flower, Chap. VI., it is stated that “extended observation leads to the conclusion that the typical flower in nature has two series of stamens, as it has two series in the perianth,” or is *Diplostemonous*, the stamen circles alternating respectively with calyx and corolla.

The more we read this admirable work, the more we are impressed with its depth and its clearness. We embrace this opportunity to add the following exposition of the place of species in classification, as, perhaps, a necessary complement to our notice.

“Species is taken as the unit in zoological and botanical classification.” . . . “The aim of systematic natural history is to express their [species] relationship to each other. The whole ground in nature for the classification of species is the obvious fact that species resemble or differ from each other unequally and in extremely various degrees. If this were not so, if related species differed from one another by a constant quantity, so that, when arranged according to their resemblances, the first differed from the second about as much as the second from the third, and the third from the fourth, and so on,—or if the species blended as do the colors of the rainbow,

--then, with all the diversity in the vegetable kingdom there actually is, there could be no natural foundation for their classification. The multitude of species would render it necessary to classify them, but the classification would be wholly artificial and arbitrary. The actual constitution of the vegetable kingdom, however, as appears from observation, is that some species resemble each other very closely indeed, others differ as widely as possible, and between these the most numerous and the most various grades of resemblance or difference are presented, but always with a manifest tendency to compose groups or associations of resembling species,—groups the more numerous and apparently the less definite in proportion to the number and the nearness of points of resemblance. These various associations the naturalist endeavors to express, as far as is necessary or practicable, by a series of generalizations, the lower or particular included in the higher or more comprehensive." pp. 322-323.

§ 337. *Polemonium cæruleum*, L.—A new locality is worth recording of this species, for which the recently published volume of the synoptical Flora of N. A. states but four localities east of the Rocky Mountains. I have met with it in three spots on the elevated (2600-2700 ft.), open glades around Oakland, Garrett Co., Md.

Growing in deep beds of *Sphagnum cymbifolium* and *S. acutifolium*, the stout, branching rhizomes develop numerous villous roots, and large (12-17 inches) leaves. The stems, single or in pairs, attain sometimes the height of 44 inches, overtopping the surrounding sedges (*Eriophorum Virginicum*, *Rhynchospora alba*, *Carex stricta*, &c.) Leaves diminishing to pinnate and simple bracts, leaflets, 7-21, ovate, lanceolate; inflorescence a narrow cymose panicle, composed of corymbose clusters terminating the main stem and the short erect branches (not a thyrsus in the strict sense of that term, as defined by recent writers, the order of development being centrifugal in respect to the primary branches as well as the ultimate clusters); flowers erect, calyx-segments longer than tube of corolla, with spreading tips; seeds 5-21, unequally divided among the cells, usually 4-6 in each, one or two often widely wing-angled and abortive; flowering from last week in June to August.

Our other species, *Polemonium reptans*, L., is also found around Oakland, but in drier and more shaded places on the mountain-sides, and flowers about a month earlier.

JOHN DONNELL SMITH.

§ 338. An Orchid new to America.—*Epipactis Helleborine*, var. *viridans*, Irm. (*E. viridiflora*, Reichenb.) as determined by Dr. Gray, was found in the vicinity of Syracuse by Mrs. M. P. Church of the Syracuse Botanical Club, on the 6th of August, during the weekly expedition of the Club to the woods. Mrs. M. O. Rust has kindly sent us specimens. The stem is leafy but no root leaves were found. The roots were fleshy and fascicled. Mrs. Rust writes: "I should judge that there could be no doubt as to the plant's being indigenous. Its home is right in the woods, the nearest habitation being a small farm-house. It does not grow over any great territory; I should think not more